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THE JOURNAL OF PHILOSOPHY

DETERMINISM AND THE CONCEPT OF A PERSON

ONLY persons can do certain sorts of things, e.g., try, deliberate, and decide. It has frequently been contended that propositions that assert that an individual is engaging in one of these activities are incompatible with determinism.

I do not intend to discuss this incompatibility claim in general. Rather, I shall take some examples from the literature in order to show that the thesis has not been adequately defended in the particular cases under consideration.

I shall not speak of determinism, but, rather, of a deterministic account. By a deterministic account of *e*, I shall mean, roughly, a set of true sentences entailing that *e* is governed by a non-statistical law, i.e., a law that specifies a sufficient condition of *e*. Some types of propositions about human action (*A*) concerning which it has been maintained that a deterministic account of *A* is impossible (the incompatibility thesis) are the following:

- I. I can do *A*.¹
- II. As a result of my deliberations, I do *A*.²
- III. I decide to do *A*.³
- IV. I exert an effort of will in order to do *A*.⁴
- V. I do *A*.⁵

(The notes refer to works in which the incompatibility thesis with reference to these particular propositions is maintained.)

¹ Richard Taylor, "I Can," *The Philosophical Review*, 69, 1 (January, 1960): 78-89.

² Richard Taylor, "Deliberation and Foreknowledge," *American Philosophical Quarterly*, 1, 1 (January, 1964): 1-8.

³ Carl Ginet, "Can the Will Be Caused?," *The Philosophical Review*, 71, 1 (January, 1962): 49-55.

⁴ C. A. Campbell, "The Psychology of Effort of Will," *Proceedings of the Aristotelian Society*, 40 (1940): 49-74.

⁵ R. S. Peters, *The Concept of Motivation* (London: Routledge & Kegan Paul; New York: Humanities Press, 1958); and A. I. Melden, *Free Action* (London: Routledge & Kegan Paul; New York: Humanities Press, 1961).

I

A thesis which Taylor develops in "I Can" is that the proposition "I can move my finger" (F) entails that the event whose occurrence would provide conclusive evidence that the proposition is true, e.g., a finger motion performed upon request, is causally contingent, i.e., undetermined.

Taylor asserts that there are only four senses of 'can' that are applied to physical objects. These are: logical contingency, epistemic contingency, causal contingency, and hypothetical possibility. Since the first two senses are clearly not involved in contexts of human agency, we may omit discussion of them. The example of hypothetical possibility used by Taylor is: "This stone is so hot it can fry an egg." The idea expressed here is that, if an egg were placed on the stone, it would fry. Taylor claims, however, that the notion of 'can' involved in F is not captured either by hypothetical possibility or by causal contingency although F entails that some finger motions are causally contingent.

There is, however, a class of examples of the use of the word 'can' which Taylor does not talk about. Some examples are: "My car can travel at 70 miles per hour," "This basket can hold 120 apples," and "This machine can make 25,000 cigarettes a day." These are capacity contexts; but there is no indication of the conditions under which the capacity is invariably exercised. Since it is evident that these sentences do not entail that the event that would count as an exercise of the capacity is causally contingent, and since logical and epistemic contingency are not at all involved, these examples come closest to those which are clear cases of hypothetical possibility. Consider, however, "This machine can produce precisely 25,000 cigarettes a day." The proposition does not seem to be analyzable into a claim of hypothetical possibility, for the following reasons: (1) The proposition does not appear to be asserting anything about the conditions under which the machine does produce precisely 25,000 cigarettes a day. One cannot, for example, produce an actual hypothetical the denial of which is incompatible with the capacity claim. (2) One may have conclusive evidence that the proposition is true, from observing that the machine sometimes does produce precisely 25,000 cigarettes a day, even though one cannot provide a specification of the sufficient condition. (3) One must not confuse capacity claims with dispositional propositions like "Sugar is water-soluble." The latter may be analyzable hypothetically; but it does not follow that the former are. Let us, then, call these examples cases of capacity.

We shall turn now to Taylor's defense of the thesis that F entails that the motion of my finger is causally contingent (since F entails that my moving my finger is causally contingent and "I move my finger" entails "My finger moves").

The statements "I can move my finger" and "I can hold my finger still" are, we said, both true, though their joint truth does not entail that I can do both at once. If, however, existing conditions are causally sufficient for my moving my finger, then it follows that it is causally impossible for me not to move it. If, on the other hand, existing conditions are causally sufficient for my holding it still, then it is causally impossible for me to move it. Since, however, it is true both that I can move it and that I can hold it still, it follows that neither is causally impossible ("I Can," 87).

The difficulty with this paragraph is that one may easily substitute capacity cases in which no human being is involved and derive the same conclusion. Consider the following:

The statements "This machine can produce *precisely* 25,000 cigarettes a day" and "This machine can produce *precisely* 30,000 cigarettes a day" are both true, though their joint truth does not entail that the machine can do both at once. If, however, existing conditions are causally sufficient for the machine's producing precisely 25,000 cigarettes a day, then it follows that it is causally impossible for the machine to produce precisely 30,000 cigarettes a day. If, on the other hand, existing conditions are causally sufficient for the machine's producing precisely 30,000 cigarettes a day, then it is causally impossible for it to produce precisely 25,000 cigarettes a day. Since, however, it is true both that the machine can produce precisely 25,000 cigarettes a day and that the machine can produce precisely 30,000 cigarettes a day, it follows that neither is causally impossible.

Taylor would obviously not want to say that the behavior of the cigarette machine is causally contingent. We may, as a matter of fact, be in possession of the laws of its operation.

The obvious moral to be drawn is that capacity sentences do not assert that there are no conditions under which the exercise of the capacity is causally impossible. "This machine can produce precisely 25,000 cigarettes a day" does not entail "It is causally possible for this machine to produce precisely 25,000 cigarettes a day under conditions *a*, *b*, and *c*" where '*a*', '*b*', and '*c*' represent (jointly) a sufficient condition of the production of precisely 30,000 cigarettes. Thus, if there are sufficient conditions of my moving my finger, then I cannot, *under those conditions*, hold it still; and if there are sufficient conditions of my holding my finger still, then I cannot, *under those conditions*, move it. The distinction I am making is one libertarians insist upon. That I can do *A* and that I can do *B* is unimportant, they point out, unless I can *exercise* both capacities in a given situation (although not simultaneously), and if there is a sufficient condition of the

exercise of one, then I cannot exercise the other. Regardless of the merits of the libertarian thesis, the confusion between the possession of a capacity and the ability to exercise that capacity under a specified set of conditions is responsible for the surface plausibility in Taylor's argument.

Why, then, can we not construe *F* as a capacity claim like any other capacity claim? If we could, *F* would not entail that my moving my finger is determined (since *F* would make no reference to a sufficient condition of my moving my finger), nor would *F* entail that my moving my finger is causally contingent (since a conclusion of this kind cannot be drawn in the cigarette-machine case and since Taylor's argument to show that *F* does entail that my moving my finger is causally contingent has been shown to be fallacious).⁶ A deterministic account of my moving my finger, then, would not necessarily be incompatible with *F*.

It is important now, for reasons which will become clear, to examine the grounds Taylor offers to show that *F* does not state a hypothetical possibility. It must be noted beforehand, however, that, even if *F* does not state a hypothetical possibility, it does not follow that a deterministic account of my moving my finger is incompatible with *F*. The fact that *F* itself does not provide a deterministic account does not imply that a deterministic account cannot be given. This is not intended as a criticism of Taylor, since he is concerned to show only that propositions like *F* are not statements of hypothetical possibility. His specific arguments for indeterminism have already been discussed.

If *F* states a hypothetical possibility, we must look for possible candidates for the antecedent of the hypothetical, i.e., for sufficient conditions of my moving my finger. There are two possible kinds of candidate, and, for the following reasons cited by Taylor, neither kind will do: (1) Events such as muscle movements, nervous impulses, and special internal mental events are inadequate because they can be causes only of finger movements, not of somebody's moving his finger. There is a special difficulty in the case of mental events, since it is dubious that a special mental event must precede every case in which I move my finger. (2) We may cite as the cause the fact that the agent wanted, tried, intended, wished, or chose to do the act. The difficulty here is that the "cause" is not specifiable independently of the effect. There are not two distinct events, wanting to do *A* and doing *A*,

⁶ One may try to show that capacity claims entail that there are sufficient conditions of the exercise of the capacity even though no specific sufficient condition is mentioned or entailed by the capacity claim. If this can be shown, then *F* would entail that my moving my finger is determined.

related causally. Doing *A* entails that the agent wanted to do *A* and, if so, the wanting cannot be a cause.

Now that Taylor's reasons have been presented, their importance becomes clear. If his arguments are sound, they suggest that it is well-nigh impossible to find a cause of my moving my finger. Physiological occurrences cause motions, whereas choosing, wanting, and the like (person concepts) cannot cause at all. Two problems present themselves: (1) Are there any legitimate candidates for the cause of actions? (2) If there are, can their descriptions serve as the antecedents of hypotheticals that express the meaning of 'I can'? If the answer to (1) is "No," then the reasons for this answer are those which are given to defend the view that a deterministic account of actions is impossible. Hence, we may reserve discussion of this issue until we turn to V. If, on the other hand, the answer is "Yes," then we may form a legitimate statement of hypothetical possibility the consequent of which is "*x* moves his finger." Suppose, however, that such statements do not express the idea of "can" contained in *F*. This may be due to the fact that *F* states a capacity and capacities are not reducible to hypothetical possibilities. In any case, a deterministic account of my moving my finger is not impossible, because, by hypothesis, it can be given.

Hence, relative to our purposes, whatever issues are raised by Taylor vis-à-vis the causation of actions can be discussed in terms of their bearing on V.

II

The fundamental argument offered by Taylor in defense of the incompatibility thesis in the present case is adequately captured, I believe, by the following:

Jones must decide between *A* and *B*.

1) If there is a sufficient condition of *A*, then Jones cannot decide in favor of *B*.

2) If Jones cannot decide in favor of *B*, then it is not up to him what he does in this case.

3) If it is not up to him what he does in this case, then his deliberation has no bearing on his decision.

Therefore, if there is a sufficient condition of *A*, then Jones's deliberation has no bearing on his decision.

Consider the following statement by Taylor:

Now I might . . . know a person and his habits well enough to know that, whenever he is confronted with a certain choice . . . then he invariably decides the same way. . . . And it is possible to suppose that, before deciding, he always or often deliberates about the matter. . . . But then I would know what he is going to do, *not* as a result of his deliberation, but as a result of

something else—of habit, for example, . . . or of whatever other condition we are supposing determines the matter ("Deliberation and Foreknowledge," p. 7).

But if his decision is the result of habit or something distinct from deliberation, then his decision is not the result of deliberation. This is a tautology. Taylor must present us with at least a *prima facie* case of decision that results from deliberation. We must examine a case in which there is the appeal to what is going on during the course of deliberation in order to determine what the decision will be. If his deliberation really has no bearing on his decision—if, for example, he was acting out of habit—then we can imagine that the course of deliberation is different and that his decision is still the same. But we must surely examine cases in which there is *prima facie* reason to believe that, had the course of deliberation been different, his decision would have been different.⁷

Let us, then, take a case in which Jones must decide between two job offers, *A* and *B*. Jones is inclined to accept *B*; but we are apprised of a fact of which Jones is not yet aware, say, that the employer at position *A* is going to offer Jones \$5000 more a year than he was originally offered. Now, we do not want to construe this case in such a way as to render deliberation irrelevant. For example, we do not want to assume that, as soon as Jones learns of the new offer, he has no problem in choosing *A*. Thus, we shall assume that Jones learns of the offer, weighs this new consideration in the light of his inclination to accept *B*, and decides to accept *A*. We shall assume, moreover, that there is a set of non-statistical laws from which one can deduce, with the addition of certain assumptions, a universal hypothetical proposition *P* whose antecedent clauses are: (1) *x* is a person with characteristics *M*, *N*, and *O*; (2) *x* must decide between positions *A* and *B*; (3) *x* has certain specified beliefs concerning positions *A* and *B*; (4) *x* considers the fact that his salary at position *A* will be \$5000 more than he originally believed. Its consequent is: *x* decides to accept position *A*.

Clearly, *P* is not a law. But it may be deducible from a set of laws if appropriate assumptions are made.

We assume, as well, that there is a universal hypothetical proposition *Q* whose antecedent clauses are identical with those of *P* except that (4) is omitted and whose consequent is: *x* decides to accept position *B*. Finally, we assume that Jones is an instance of *x* relative to the hypothetical *P*. Since the consideration of a

⁷ The next example taken up by Taylor, a case of a man who leaves a room because it is on fire, suffers from the same defect.

fact relative to a decision (4) is deliberation, it appears to follow that deliberation has a bearing on the decision even though the decision is law-governed. Can Taylor's argument prove otherwise?

Suppose, for the purposes of argument, we accept the first premise in Taylor's argument. We must then say that Jones cannot decide in favor of *B*, in part because he considered a certain reason—or, better, because he assessed a certain reason in a certain way. (Assessment is a part of deliberation.) Moreover, if he had not considered that reason, then he would not have made the assessment he did make, and would have decided the other way.

In light of the above, consider the second premise. Since Jones cannot decide in favor of *B* because of the way in which he has assessed a certain reason, it is difficult to understand how this premise can be considered tenable. The decision is "up to him" because, in part, he assessed a reason in a certain way, so that, had he assessed it differently, he would have made a different decision.

But suppose we grant that 'up to him' is legitimately used only in a contraccusal sense. The third premise, then, is untenable. The number of cigarettes produced by a machine is not "up to the machine," at least in the contraccusal sense of 'up to *x*'. It is nonetheless the case that what happens in the machine during the course of the day has a bearing on the number of cigarettes produced that day. Now deliberation is the consideration and assessment of alternatives, and, surely, the way in which this proceeds has a bearing on the eventual decision that is made.

I think one may look at the three premises in two ways. Taylor wants to assert that the course of deliberation is not "free" if the eventual decision is determined. Thus, if a deterministic account of Jones's decision can be given, Jones cannot decide the other way and it is not up to Jones. But there is surely a difference, even to a libertarian, between saying that the decision was "freely" made and saying that deliberation was causally relevant to it. One may deny the former; but one must grant the latter if it is assumed that both *P* and *Q* are true. One need not *always* construe deliberation as epiphenomenal.

Even if one can show (or predict before deliberation) that the way in which a factor is assessed in deliberation is law-governed, it does not follow that deliberation has no causal efficacy. "If this piece of butter is heated to 150°, then it will melt, and if it is touched as soon as it melts, a burning sensation will occur" is not incompatible with "If this piece of butter were not touched as soon as it melts, no burning sensation would occur."

It may be argued that the application of the causal model to the deliberation-decision sequence is impossible because the sequence is then treated as a series of happenings rather than activities and this is a mistake. It will be recalled, however, that considerations such as these are directed primarily to the incompatibility theses relative to *V* and will, therefore, be dealt with when *V* is discussed.

If what I have said is true, then Taylor's major thesis, viz., that no one can know what another is going to do as a result of deliberation before the conclusion of the deliberation, is false. (By 'knowing', Taylor means "knowing on the basis of a sufficient condition.") He points out that the sufficient condition cannot be revealed to the decider, since the latter cannot deliberate if he believes that his decision has a sufficient condition. But even if the decider cannot know, it does not follow that others cannot know. Taylor says, however:

The fact that a man is deliberating is no *obstacle* to his knowing, or learning, anything whatever, any more than a man's being a bachelor is an obstacle to his marrying someone. The fact that a man knows or can find out by inquiry what he is going to do, on the other hand, is an obstacle to his deliberating about it and then doing it as a result of such deliberation, just as the fact that a man has a wife is an obstacle to his having still another ("Deliberation and Foreknowledge," pp. 7-8).

But when a man marries, he is no longer a bachelor. Analogously, perhaps, when a man learns that there is a sufficient condition of his action, he no longer deliberates (or can deliberate). Thus, I can see no reason for denying that *A* can know what *B* will do as a result of deliberation although *B* cannot know this, for, if *B* knows what his decision will be, he no longer deliberates, and if he no longer deliberates, then *A* cannot know what *B* does as a result of deliberation. If Taylor's argument were sound, we should have to say that *A* cannot know that *B* does not know that Aristocles was Plato's real name, for, if *B* were told that Aristocles was Plato's real name, he would no longer be ignorant of this fact.

III

Ginet claims to prove that it is conceptually impossible for a decision to be caused by deducing it from the following two propositions:

A. It is conceptually impossible for a person to know what a decision of his is going to be before he makes it.

B. If it were conceptually possible for a decision to be caused,

then it would be conceptually possible for a person to know what a decision of his was going to be before he made it.

I do not propose to question A and shall assume, for the purposes of this discussion, that A is true.

With respect to B, Ginét cites two conditions which are jointly sufficient for knowing a decision before making it under the assumption that the decision is caused. They are:

1. The decider knows, before his decision, the causal law whose consequent describes his decision.
2. The decider knows, before his decision, the existence of all the factors described by the antecedent of the causal law.

Since the conjunction of 1 and 2 entails a sentence describing a situation that has been shown to be conceptually impossible, viz., A, it follows that the conjunction of 1 and 2 is conceptually impossible. Hence, Ginét must prove that a decision's being caused entails the conceptual possibility of both 1 and 2. If this can be done, it will have been proved that it is conceptually impossible for decisions to be caused.

Ginét attempts to prove the conceptual possibility of 2 under the assumption that decisions are caused, by examining three ways in which its possibility might be ruled out. The first way involves the stipulation that ignorance of certain causal factors forms an inevitable part of the cause of a person's decision. Then, indeed, no one would know before his decision the existence of *all* the factors described by the antecedent of the causal law. But, says Ginét, there is no way of guaranteeing that the cause will contain this factor (ignorance) and "neither could a set of circumstances be ruled out as a candidate for the cause merely because it lacked this feature."⁸ But, *on Ginét's own grounds*, ignorance of some causal factors—if there is a cause and if the causal law is known by the decider—is part of the *notion* of a decision and not one of its causal antecedents. We have seen that the conceptual impossibility of the conjunction of 1 and 2 is derived from an analysis of the notion of a decision, the results of which are formulated as A. Under the assumption that a decision is caused, therefore, ignorance of either the causal law or the existence of all the antecedent factors is part of Ginét's *analysis* of a decision.

If we turn now to the third way of excluding the second condition, we find, contrary to Ginét's claim, that it is an excellent way. It concerns the meaning of 'decision'. By knowing the meaning of the term 'decision' (on Ginét's own analysis) we know

⁸ Ginét, *op. cit.*, p. 54.

that, if decisions are caused, a person who decides is ignorant, before the decision, of some of the factors responsible for his decision or of the causal law governing it. This implies neither that his decision is caused nor that it is uncaused. Also, it imposes no restrictions on anyone's capacity to acquire causal information; it simply restricts us from using a certain description to apply to people who have acquired certain causal information. To take an analogy, if I describe a person as a complete psychological ignoramus, I mean to say in part that he does not know the cause of many decisions that he makes; but I do not necessarily imply that they have no causes. In other words, there are some expressions that include ignorance of one sort or another as part of their meaning, and 'deciding' is one of these.

Whether or not the above is a correct analysis of 'decision', it is the analysis to which Ginet commits himself—or, at least, which is compatible with everything he really proves about decisions—and which bars him from proving what he sets out to prove.

Of course, then, decisions are fairly complex entities and, although specific, cannot be conceived on the model of flashes and bangs, as Ginet intimates.⁹ Surely, though, we give causal accounts of very complex events (the Civil War, the Great Depression), and nothing that Ginet has said excludes the possibility that a decision is a complex event.

Ginet may charge at this point that the conception of causation in which he is interested requires that the cause be specifiable independently of the effect. To include ignorance of some causal factors in the effect (the decision) is to violate this requirement. This charge is false, since the existence of something *C* is logically distinct from ignorance about its existence. (Of course, ignorance about the existence of *C* must not be taken as implying the existence of *C*. It must be construed simply as the absence of belief in the existence of *C*.)

Of course, to be certain that I am deciding, one must know that I am not aware of all the causal factors, and, in order to know this, one must know at least one of the causal factors and know *that it is* a causal factor. But this interesting fact about the term 'decision' does not violate the Humean requirement that simply asserts the logical independence of cause and effect. To reiterate, "I do not believe that *P*" is logically independent of *P*. Thus, justification for using the term 'decision' requires causal knowledge; but 'deciding' does not refer to causal factors.

Hence, the conceptual impossibility of 2 must be granted on Ginet's own analysis of a decision if the conceptual possibility

⁹ *Ibid.*

of 1 is admitted. The proof of B, therefore, fails and, with it, the proof that decisions cannot be caused.

IV

Campbell is concerned to discover whether or not it is possible to provide a deterministic account of decisions that are made when the person must call forth an effort of will, i.e., must "reinforce the energy of the weaker desire," in those cases in which he believes that a certain course of action is morally superior to the course of action toward which his desiring nature inclines him:

Is it an unique form of energy, as the agent himself is apt to suppose, different in kind from that energy of the desires which is the dynamic of at least most of our choices, and the antecedents of which can be traced with some show of scientific rigor to determinate elements in the agent's psychical make-up of instincts, emotions, sentiments and the like? Or is it, despite first appearances, reducible to some specific manifestations of the energy of desire in a determinate context of circumstances which the psychologist can make plain to us? These are, broadly speaking, the alternatives between which the student of the problem has to choose.¹⁰

But, of course, Campbell has posed the problem in question-begging terms. The crucial presupposition is that, if an account of the decision in terms of desire is impossible, then no deterministic account is possible. As Campbell shows in his critique of McDougall, the attempt to find desires, e.g., self-respect, pride, that may supplement the weaker desire and thereby make it stronger is doomed to failure, since no effort of will is required if the decision is in favor of that which is desired more. Campbell has not shown, however, that the development of a person's conscience, moral beliefs, and attitudes, etc., cannot be understood deterministically. (Psychological theories do try to provide an account of such matters.) Campbell hypostatizes his approach to this problem by equating desiring nature with character and (part of) moral nature with self—although, paradoxically, a person's character is often given in terms of his moral traits, e.g., honesty, diligence, even if the manifestations of, say, honesty on the part of a particular person frequently require an effort of will. To conclude, however, that explanation in terms of character, but not explanation in terms of self, can be converted into deterministic explanation, is to beg the same question with new terminology.

It may be true that I am aware that *I* am exerting effort of will in conflict cases; but I am also aware that *I* am deciding when,

¹⁰ Campbell, *op. cit.*, p. 51.

for example, there is a conflict between desires and no moral issue is involved.

Campbell does not maintain he has established that a deterministic account of decisions involving effort of will is impossible. But the terms in which he poses the problem provide undue support for this conclusion.

V

We turn now to the question that seems to be central to this general problem: Is a deterministic account of an action possible? The issues involved here are, however, so complicated (for example, an adequate analysis of causal propositions would help), and so many arguments have been advanced in defense of a negative answer, that I shall restrict myself to a few remarks in defense of an affirmative answer.

Fortunately, some spadework has been done. Donald Davidson, in a most illuminating article,¹¹ has defended the view that the primary reasons for an action (the beliefs and attitudes that explain why the action is performed) are the causes of the action. In doing so, he has replied adequately to a number of criticisms of this position, especially those of Melden. Also, Arnold Kaufman has defended the view that ability is causally related to successful performance.¹² I shall restrict myself, therefore, to an examination of distinct points, although some overlapping will occur.

Peters argues that causal accounts of events cannot be sufficient if the event is a human action.¹³ He maintains that an account of behavior in terms of antecedent movements of the body is insufficient, since an action, e.g., the signing of a contract, cannot be specified in terms of a unique bodily movement or collection of bodily movements. He does suggest, however, that indirect prediction of actions may be possible if there are bridging laws correlating physiological findings with descriptions of actions.

Peters is unnecessarily cautious here. The description of an action entails no specific description of bodily movements; but it is also true that the description of a bodily movement entails no specific action-description. To use Warnock's example,¹⁴ if we know that Smith's foot comes into contact with Jones's shin, we

¹¹ "Actions, Reasons, and Causes," this JOURNAL, 60, 23 (Nov. 7, 1963): 685-700.

¹² "Ability," this JOURNAL, 60, 19 (Sept. 12, 1963): 537-551.

¹³ Peters, *op. cit.*, pp. 9-16.

¹⁴ G. J. Warnock, "Actions and Events," in D. F. Pears, ed., *Freedom and the Will* (New York: St. Martin's, 1963), p. 77.

do not know whether Smith is kicking Jones or clumsily showing Jones his new shoelaces. Hence, bridge laws of this kind are impossible unless one supplements the antecedent in some way. Bodily movements are too unspecific.

Even if bridge laws are possible, says Peters, "we would *first* have to grasp concepts connected with action like 'knowing what we are doing' and 'grasp of means to an end.'"¹⁵ There is a confusion here between predicting an action on the basis of causes and explaining what it is to be an action. Must a causal account provide an analysis of the concepts embodied in a description of the effect? Would we reject an account of psychotic depression in terms of chemical imbalance in the brain because the reference to chemical imbalance does not tell us what it means to lack interest in things? Peters may be right, then, when he says that predictions of actions on the basis of movements are not "sufficient explanations"; but many deterministic accounts are not sufficient explanations in his sense.

The same mistake is involved in Peters' reference to actions as intelligent or unintelligent. Why must a deterministic account of an action show that the action is intelligent or explain the meaning of 'intelligent'? The same may be said of Peters' reference to the fact that actions involve standards or rules.

The insufficiency of antecedent bodily movements does not, of course, prove that there are no sufficient conditions of actions. But, if the only other conceivable candidates for the additional conditions are choices, wants, and the like, and if Taylor is correct when he says that such conditions are connected analytically to actions, then the thesis that no deterministic account of action is possible must be admitted.

But, of course, there are an indefinite number of candidates for the additional conditions. In the first place, environmental factors evidently play a role in the causation of human action. "The authoritarian situation *produced* two distinct types of reaction: An apathetic or submissive pattern and an aggressive pattern. . . . The aggressive group . . . gave evidence of . . . some channelized aggression against the leader" (my italics).¹⁶ Or, to report the results of a study on the merits of the lecture approach as compared with the discussion approach when an effort was made to get American housewives to forego, during World War II, the choice cuts of meat and increase their use of beef hearts, etc.,

¹⁵ Peters, *op. cit.*, p. 14.

¹⁶ Daniel Katz, "The Influence of the Group on Social Behavior and Attitudes," in J. P. Guilford, ed., *Fields of Psychology: Basic and Applied*, 2nd ed. (Princeton, N.J.: Van Nostrand, 1950), p. 246.

"only 3 per cent of the women in the lecture groups served one of the meats never served before, whereas 33 per cent of the women in the discussion groups served one of these foods."¹⁷

Consider the following argument: Since the presence of an authoritarian situation cannot cause Smith's foot to come into contact with Jones's shin, although it can cause Smith to kick Jones, the authoritarian leader, it follows that no causal account of the motion of Smith's foot can be provided. The argument is absurd. If it is, then Peters' argument is also.

One may, indeed, point out that any environmental situation is insufficient, for one must make certain assumptions about the psychological make-up of the individual who is behaving in order to have a genuine sufficient condition. This is true. To state the concepts that ought to be used in describing these assumptions is to take a stand on psychological theory formation. It is true that we have a stock of expressions for this job—need, drive, desire, motive, attitude, reason, purpose, and the like. Psychologists make use of some of these concepts, and they find certain concepts more fruitful than others. It is surely a mistake to believe that such concepts or some subclass of these concepts cannot be used in a causal explanation because of their connection to action. None of them, even desire or want, is connected analytically to a particular action in the sense that a sentence describing the action entails a sentence asserting that the agent wanted to perform the action. (Taylor is mistaken on this point.) The concepts have some explanatory power.¹⁸ Melden's most serious error, in my opinion, is to confuse the legitimate Humean requirement that cause and effect be logically distinct with a requirement stipulating that an analysis of the concepts used in describing the cause (the concepts that appear in a description of the content of the desire) must make no reference to concepts used in describing the effect.¹⁹ I see no reason to adopt the latter requirement.

(Peters rejects antecedent physiological or bodily motions as causes of actions because they are *not* "logically connected" to action, and Melden rejects motives and wants as causes of actions because they *are* "logically connected" to action. I have tried to uncover the confusions responsible for the errors in each view.)

But it would be a serious mistake to insist that all the above concepts are causal. Nothing significant can be said about *all* of them. The job of philosophical psychology is difficult and often has to proceed in piecemeal fashion. Some of the concepts may turn out to be dispositional, some theoretical, some superfluous, etc.

¹⁷ *Ibid.*, p. 250.

¹⁸ See Davidson, p. 696.

¹⁹ See Davidson, pp. 687–88; and Kaufman, p. 542.

What is important to note is that some of them may play a role in lawful accounts of human action. Some philosophers wince when the movement of an electron is cited as a cause because propositions about electrons are connected in a complicated way to observation propositions. There may also be a complicated connection between propositions about desires or motives and other sorts of propositions about human beings, e.g., physiological propositions, neurological propositions, propositions about overt behavior, and propositions about occurrent "mental" behavior (I noticed x ; I am thinking about x ; I crave x). If propositions about electrons can form part of a lawful account, why may not propositions about desires and motives, even if the latter notions are complex and even if it is a mistake to view them as causal notions?

Another consideration that has led philosophers to reject the possibility of deterministic accounts of action is the bizarre set of restrictions they often impose. Thus, Peters says: "unless we include under 'causes' things like the person's training and grasp of the rules, which are things of a different order from 'causes' in the sense of antecedent movements."²⁰ Melden, too, at many points in his book, suggests that the paradigm or only legitimate kind of case of causal explanation in the human sphere is one in which reference is made to antecedent movements of a muscular or neurological sort. One cannot appeal to ordinary language in order to justify these restrictions except to note that 'cause' is often used when there is the feeling that the person is passive, that something is making him do something, whereas words like 'reason' are used when we view the person as an agent. I think that this reflects certain associations that we do sometimes attach to the words 'cause' and 'effect'—effects are helpless and passive. For this reason, I have no objection to the elimination of the notion of causality in these matters, so long as one recognizes that a *lawful* account of human action is possible. The acceptance of the proposition "Frustration causes aggression" may lead Peters, Melden, et al., to feel that, when a person is frustrated, he then sits back and waits to find himself acting aggressively. Since this is obviously not what the proposition means, we may restate it in another way, viz., "There is a law which asserts that, whenever human beings are frustrated, they will act aggressively." Libertarians may be right when they claim that deterministic accounts of action entail that the person could not have acted otherwise. But the person did act.

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²⁰ Peters, *op. cit.* 7.

COMMENTS AND CRITICISM

DELIBERATION AND EXCLUDED MIDDLE

ALTHOUGH I am very much in agreement with most of Richard Taylor's fine article on "Deliberation and Foreknowledge,"¹ I do wish to comment on a dubious remark in the last paragraph. This is that "there can be no truth or falsity in any assertion about what any man's future deliberate act will be." Taylor is here assuming that "X will occur" and "X will not occur" must be *either* contradictories (rather than contraries) *or else* not well-formed statements capable of truth or falsity. But his previous argument is compatible with the view that the two statements are contraries, and thus may both be *false* in case the truth is "X may or may not occur." On this view, "real (causally conditioned) possibilities" are not merely subjective or linguistic, and "X will occur" means "*all* the real possibilities include X," while "X will not occur" means "*none* of the real possibilities include X," and "X may or may not occur" means "*some only* of the real possibilities include X." This third statement contradicts both of the others, which therefore must be alike false if it is true. In this way we save Excluded Middle for statements, and put our "third value" into the *meaning* of statements, rather than into their truth status. This seems to me preferable.

In some cases the main result of a deliberation to act may be highly probable, or even perhaps strictly predestined, but in such cases, as Taylor seems to hint but doesn't quite say, what one is really deliberating about with respect to a future act is only the details as to how, when, or with respect to what motives, or after how thorough or superficial reflection, to perform the action. Always *something* must be really open, that is, included positively as well as negatively in the causally real possibilities, or there could be no deliberation. Indeed, I should add, there could be no consciousness and no experience, for all experiencing is in some broad sense "deciding" among real possibilities.

Steven Cahn's attempted proof for the "fatalistic" conclusion, which Taylor finds impressive, seems to me plainly sophistical.² "In order to issue order O (for the battle) at T_1 , all conditions necessary for the issuance of that order must *then* [italics mine] be satisfied, and one of these conditions is that a naval battle occurs at T_2 . But this condition is not satisfied at T_1 . Therefore order O cannot be issued at T_1 ." The same argument shows that order O' (not to fight) is also not possible at T_1 . However, the

¹ *The American Philosophical Quarterly*, 1, 1 (January, 1964): 1-8.

² This JOURNAL, 61, 10 (May 7, 1964): 295-305.

future consequences of a determinate act, as events that definitely will occur, are necessary only to the actuality of the act, not to its mere possibility. For *that*, the *possibility* of the future consequences suffices. Moreover, the possibilities for a decision and for its consequences, as possibilities obtaining at a given time, depend only upon what is past to that time. Given an event itself as determinately actual, it is absurd to ask, Is the event, or its non-occurrence, possible? And we do not normally speak in this fashion. We ask, How *was* it possible, or, Was there a possible alternative? Moreover, to call a future consequence of the event, however sure to follow if the event occurs, a "necessary condition of the event" is ambiguous (and Cahn's argument is a fallacy of ambiguity). Condition of possibility, or of actuality? (Determinists may fail to see a distinction here, but that is the question at issue, in one of its formulations.) Condition of the possibility of a decision is the mere possibility of its consequences (that they *may* or may not occur); condition of the determinate actuality of the decision is the destined actuality of its strictly implied consequences (that they definitely *will* occur). But until a decision is made, it has no wholly definite character, and no wholly definite implications for the future. Hence there can be no need for "the battle will occur" to obtain until the decision is made, and then it is too late for there to be any difficulty about the decision being made.

The whole idea that past and future "condition" the present in the same way begs the basic question at issue. To determine what *can* be decided we do not really consult the future, but only the past. Suppose a predicted eclipse is relevant, the prediction and the grounds for it are already past when used. In last analysis, only the past, not the future, is premise for deliberative reasoning. And no event can at one and the same time be merely possible, open for decision, member of an open alternative, and yet also determinate, decided, member of a closed alternative. The alternative *was* open, but now it *is* closed; its implied consequences *were* merely what *could*, and also could fail, to be; but now they *are* what *will* be (without alternative any longer possible).

In this way we escape the trap. And we also retain Excluded Middle, so far as propositional truth values are concerned. All that must be given up is the notion that predication about particular happenings can be understood from a timeless standpoint, as though the human thinker were the immutable yet world-knowing deity of medieval theology.

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A NOTE ON KNOWLEDGE AND PROBABILITY *

IN my paper † I failed to see that rejecting P2 is not sufficient to make consistent the system of epistemic principles proposed by Professor Chisholm in *Perceiving*. P4 appears acceptable, and, as Lehrer so neatly shows, in conjunction with P1 and D1 it leads to inconsistency. Hence, Lehrer concludes that "we must reject P1, a somewhat more radical alternative than the one Sleight proposes." This proposal does seem to me to be radical. It is worth noting that either of the following principles will suffice in place of P1 in order to produce the inconsistency Lehrer has discovered:

P1'. If s has adequate evidence for h , then h is more probable than not on the total evidence of s .

P1''. If h is more probable than not on the total evidence of s , then s has adequate evidence for h .¹

P1'' may appear suspicious to the wary, but P1' seems considerably less peccable. One obvious alternative to rejecting P1' is to reject D1. Indeed, Professor Gettier has provided a proof that D1 must be rejected.²

If we try this alternative, then, in order to avoid inconsistency, we must not only offer a new definition of knowledge, but, apparently, we must offer a definition that accords with the following principle:

P6. If K is a set of propositions and α is the conjunction of the elements of K and if α is not more probable than not on the total evidence of s , then there is a proposition p such that p is a member of K and S does not know that p .

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* Keith Lehrer, "Knowledge and Probability," this JOURNAL, 61, 12 (June 11, 1964): 368-372. The numbering of principles, definitions, etc., here refers to Lehrer's article.

† "A Note on Some Epistemic Principles of Chisholm and Martin," this JOURNAL, 61, 7 (March 26, 1964): 216-218.

¹ In the argument produced by Lehrer, P1' may replace P1. The same conclusion may be reached from P1'' and two further principles, i.e., (i) If S knows h , then S has adequate evidence for h ; and, (ii) If S has adequate evidence for h , then $\sim (S \text{ has adequate evidence for } \sim h)$. Both of these principles are acceptable, I assume.

² Edmund L. Gettier, "Is Justified True Belief Knowledge?," *Analysis* 23, 6 (1963): 121-123.

BOOK REVIEW

Kant's Theory of Mental Activity: A Commentary on the Transcendental Analytic of the Critique of Pure Reason. ROBERT PAUL WOLFF. Cambridge: Harvard University Press, 1963. xii, 336 p. \$7.00.

Robert Paul Wolff has presented us with just the kind of work that a new book on Kant should be. In straightforward, contemporary, and thus necessarily non-Kantian language, he restates and analyzes the key concepts of Kant's doctrine, making them as readily comprehensible as we may reasonably expect them ever to become. He separates and identifies Kant's tangled, often conflicting trends of thought, in the interest of clarity and accuracy. Concerned, however, less with the possible chronology of the various lines of argument (as emphasized in standard expositions of the "patchwork" theory) than with their logic, he focuses attention on the one that seems to him the most impressive, interpreting, reorganizing, and even amplifying it with admitted freedom. Whatever there is in the result that exceeds the warrant of Wolff's detailed documentation (and there is less, I think, than his scrupulousness leads him to imply) is explicitly determined and justified by his purpose of "making good sense and a reasonable argument" of the central thesis of the *Critique* (121).

The book is not, then, despite its subtitle, primarily a commentary in the ordinary sense, a reference work in which we look up perplexing passages for elucidation—although it may well serve that purpose for much of the *Transcendental Analytic*, especially for those parts which it paraphrases in detail. Wolff's paraphrases have a simplicity both brilliant and refreshing; and even his occasional frank avowals of defeat, like "What this means, however, I confess I do not know" (177), are more helpful than the customary addition of the commentator's confusions to Kant's obscurities. Yet the book is above all an interpretive and evaluative study which provides us with a new vantage point for the understanding of Kant and for deriving the maximum philosophical relevance and value from that understanding.

To reach this vantage point, Wolff's basic device is an attempt to prove—or, rather, to extract a coherent proof from the contorted discussions of the *Critique* itself—that the categories really are, as Kant asserts, "necessary conditions" of consciousness; in other words, that their validity follows deductively from the premise that I am conscious. For the categories that Wolff considers most important, those of causality and community, he believes that a full-fledged formal proof is possible; and he sup-

plies it for causality. In the course of Kant's discussion, however, Wolff discerns several stages in which tentative proofs are developed, argued, found inadequate, partly discarded but largely carried over into the next improved version—until finally the task, which Kant of course intends as that of the Transcendental Deduction, is brought to completion by the deduction of the individual categories in the section on the Principles, especially the Analogies of Experience. For the preliminary proofs, too, Wolff provides formalizations. And in the course of simultaneously building up this scheme, explaining it, and explaining by means of it, he develops a large number of interesting interpretations, some more persuasive than others but all meriting attention.

In regard to the total argument which the proofs summarize, Wolff explicitly claims "not to show that it is a valid argument, but only to show that it is a clear, coherent, unmetaphorical argument, and one which is worthy of serious consideration" (111). In these terms, he is unequivocally successful. The question of validity, however, inevitably becomes central in any such consideration; and Wolff's own opinion seems to be that the general outlines of Kant's argument, in spite of deep-seated difficulties and incompletely solved problems, do prove their point. In this respect, I think, the book is less convincing, although far from ineffectual.

Short of reproducing the five successive formal proofs in full, it is impossible to do justice to the care and skill with which Wolff organizes Kant's argument. Roughly, however, his exposition runs as follows. The unity of consciousness (Kant's "transcendental unity of apperception") is undeniable; events in my consciousness are grouped together in some way in which they are not grouped together with events in your consciousness. That way of grouping is memory; I remember my sense perceptions but not yours. Memory involves not only "reproduction in imagination" but "recognition in a concept"; we must know what the reproductions reproduce. We can do this only if the reproduction follows a consistent "rule," or set of rules, for connecting events (i.e., for "synthesis" of a "manifold") in consciousness. In connection with this step, the analysis of concepts as rules of mental activity and of the categories as "second order rules" which tell us what kinds of concepts to use (121–126) is one of Wolff's most original and valuable contributions. The connections thus established are "necessary connections," because they are required by rules which in turn are required for consciousness; and necessary connection is identified by Kant with objectivity. There is, in other words, an objective world, a world known by

objective empirical knowledge; i.e., there are valid synthetic judgments a priori.

The proof so far, if valid, seems to establish that *all* the contents of consciousness are objective; but Wolff, noting this difficulty, argues that the distinction between the subjective and the objective is effectively established by the same line of argument that Kant uses to identify the "rules" specifically with the categories, especially that of causality. First a new premise is added—the fact that all consciousness is temporal; time is "the form of inner sense." Hence sense perceptions just as we receive them, as mental states, must occur in temporal sequence, and the rules according to which we necessarily reproduce them must be rules of temporal sequence (causal laws). The difference between subjective association and objective connection, then, is exhibited as a difference in time order, as in Kant's famous example of the sides of a house, seen in succession but objectively simultaneous.¹ Thus universal causality is inferred deductively from the unity of consciousness (formal proof, p. 278). Wolff believes that the other categories, too, are meant to be rules of "reproduction in imagination" necessary for the unity of consciousness, but that (probably with the exception of "community" and "permanence," the latter as a substitute for Kant's "substance") they cannot be so rigorously derived (276).

Wolff has undoubtedly disentangled one authentic line of Kant's thought and stated it more explicitly and coherently than Kant himself, providing a very effective aid toward understanding of the *Critique*. He has not, however, shown the argument to be entirely cogent. The "reproduction in imagination" inferred from the unity of consciousness is merely memory, and the only "rule" needed for recognizing a remembered sense perception would seem to be that of identity. It is true that a sense perception has an identifiable character only in contrast with a different sense perception immediately preceding it; but the necessity of *some* sequence is not the necessity of *this* sequence rather than some other, although Wolff vaguely perpetuates Kant's confusion on this point² (271). It would be more plausible, perhaps, to find a causal relation between the sense perception itself and the memory of it, whether or not the two events occur in immediate sequence; but in any case, no connection at all—necessary or other—is thereby established, either in consciousness or objectively, between any two sense perceptions of which neither is a reproduction of the

¹ *Immanuel Kant's Critique of Pure Reason*, translated by Norman Kemp Smith (London, Macmillan, 1953), p. 220 (A190–191).

² *Ibid.*, pp. 220–221 (A191–192), p. 225 (A198–199).

other. It is not at all evident that the universality of the causal principle, not to mention the entire set of categories, can be derived from so limited and rudimentary a "rule" as memory requires. When Wolff infers, however, that "all the contents of my consciousness . . . have . . . an objective order" (278), he clearly means that every event in consciousness is connected (necessarily, according to a rule) with *every* other, not merely with *some* other. Thus he depends on an equivocation by which the demonstrated "reproduction according to a rule" is stretched to include further reproductions according to different rules; otherwise the connection, while it obviously exists, is merely the unity of consciousness from which we started.

Part of the trouble seems to be Wolff's and part Kant's. Wolff, I think, is mistaken in his selection of the unity of consciousness as the premise. Kant's premise, in the "subjective deduction" with which Wolff is here concerned, is merely the fact that we have sense perception, the simplest, most obvious kind of conscious state. We can be conscious even of a sensation, he observes, only if it has some duration, however brief. Then, however, it is a "manifold," because time is divisible. ("Every intuition," Kant says—not "every sequence of intuitions" nor "every consciousness as a whole," although these will come later—"contains in itself a manifold. . . ."³) To perceive a manifold as one sensation, i.e., to perceive at all, we need the synthesis that Wolff explains. And since I can "reproduce" (remember) only my own sensations, there must be an "I" whose sensations they are, a subject of consciousness ("transcendental unity of apperception"). We are not conscious of it, but without reference to it no consciousness is conceivable.⁴

Thus Kant infers the unity of (a subject of) consciousness from the fact of memory, not vice versa, and can go on to make further inferences from that unity without rendering the entire previous argument superfluous. *All* the concepts, or rules, by which our sense perceptions are interrelated must relate them within the same unity of consciousness and must therefore exemplify ways in which that unity *can* relate them—its "conditions," or "functions," in Kant's habitual language.⁵ These, of course, are the categories, although, as Wolff emphasizes, it has not yet been determined what the individual categories are.

By changing the starting point, however, we do not yet have a completely successful proof, although now the difficulty is

³ *Ibid.*, p. 131 (A99).

⁴ *Ibid.*, p. 136 (A107).

⁵ *Ibid.*, e.g., p. 139 (A111-112).

Kant's as well as Wolff's. We can now justify the inclusion of a wider variety of rules for the interrelation of sense perceptions in consciousness. But must everything of which we are conscious conform to *all* the rules or only to some—perhaps only to at least one? In the latter case, that one could still be the bare identity recognized in memory; and the categories, while available, would still not be required. Indeed, from one point of view the categories should not be required for all the contents of consciousness, while from another point of view they should; and here we have a difficulty which Wolff himself raises and tries to solve. If necessity is to be equated with objectivity, necessary principles should apply not to all consciousness but only to objective consciousness (“experience” as Kant defines it). Then, however, why are the principles necessary at all? If we can have consciousness without them, there is no guarantee that we shall ever have consciousness that conforms to them; and, to the extent that Kant claims to provide such a guarantee, Wolff is quite right that his “argument will not work unless the categories are viewed as necessary conditions of any consciousness whatsoever” (159).

There is no doubt that Kant makes many contradictory statements on this point, and some ambiguous ones. On the whole, however, I think the extent of the ambiguity contributed by Kant's use of the term “experience” has been exaggerated, not only by Wolff but by most commentators.⁶ We can, if we try, almost always assume that Kant uses the term to mean *objective* experience, just as he says he does; and the more we credit him with consistency on this score, the more of his discussion of the categories clearly confines their application to objective experience only. To interpret Kant as coherently as possible, in that case, we need his distinction, which Wolff calls “quite important” but does not treat as important (237), between the “mathematical” principles, which are “constitutive of all consciousness” (because they concern the nature of any sense perception as such,⁷ apart from its relation to other sense perceptions), and the “dynamical” principles, “constitutive” of objective experience but merely “regulative” of sense perception as such (i.e., applied to sense

⁶ Wolff's interpretation of “experience” as “consciousness” in the statement “the relation in the existence of the manifold has to be represented in experience . . . as it exists objectively in time” (243) seems entirely impossible.

⁷ The Anticipations of Perception are greatly clarified by Wolff in terms of the dynamical theory of matter; but surely this section also contains among its intricacies the simpler notion that every sense perception has some particular sensory quality.

perceptions wherever they can be made to fit in).⁸ On this basis, however, it is clear that Kant has not discovered "a new kind of necessity" (323) after all, but has really shown his so-called "synthetic a priori" principles to be analytically necessary and synthetically applicable.⁹ Once we include the dynamical categories, all the categories taken together are a *definition* of objective experience, and conformity to them is a necessary condition (criterion) of objectivity. There can be consciousness that does not conform, but it is not to be regarded as objective. That we have objective experience, then, would seem to be merely an empirical fact. Certainly Kant recognizes that particular causal laws must be discovered empirically in any event—a problem which Wolff later discusses (301 ff.) comprehensively and penetratingly.

Nevertheless, it is obvious that Kant also intends something more; and Wolff's discussion of the subjective-objective distinction in terms of two time orders, while it does not appear completely accurate and cannot entirely solve the problem, contains valuable suggestions and pushes the solution perceptibly forward. The difficulty reappears, as Wolff sees, in a new form; it is now the objective time order (temporal sequence according to a rule) that is to serve both as a necessary condition of consciousness and as a means of distinguishing the subjective from the objective (275, 279). In this form, however, Wolff believes that the question has an answer and that Kant is able to provide it.

A tentative answer seems to be that the subjective order is not conscious but pre-conscious. Wolff rejects this, because he sees pre-conscious time as a contradiction in Kantian terms, and also because such a concept would not account for the distinction between subjective and objective consciousness (279). He does, however, greatly clarify Kant's occasional expressions of views of this kind, in terms of the "double affection" theory adopted in the *Opus Postumum*. In this doctrine, according to which the mind itself, affected by the thing in itself, produces prior to consciousness the phenomenal objects which it then reproduces in consciousness, the notion of "transcendental synthesis" finally becomes unambiguous (169–173, 236–238). This line of thought, however, Wolff shows to be "less profitable" than Kant's development of a basis for objectivity within consciousness, an achievement to which the *Critique* itself "comes very close" (173).

⁸ Kant, *op. cit.*, p. 546 (A664).

⁹ I have tried to work out more fully the analytic interpretation of these principles in *Kant and Current Philosophical Issues* (New York: New York University Press, 1961), pp. 28–40, 55–65.

Wolff proceeds, therefore, to another alternative, which he finds most clearly adopted in the Analogies. Since consciousness has been shown to require both sense perception and concepts, and since all consciousness is temporal, there are two *conscious* time orders—one that we apprehend and one that we think or judge. The latter is the necessary, causal, objective one, since necessity is a feature of judgments rather than of apprehension (279–280). This means that all sense perceptions are *both* subjective and objective, although not in the same order; so that those categories which distinguish objective experience (of which causality is Wolff's working example) can do so while still applying to all contents of consciousness. It is still not quite evident that they must, but we now see how they can; and it is in this respect that Wolff here makes a substantial contribution to the interpretation of Kant.

One difficulty suggests itself immediately. Even if all consciousness does involve *some* concepts, and even if necessity belongs to judgments rather than to sense perceptions, surely we cannot assume that *all* judgments are necessary or infer that all consciousness involves necessary concepts. It appears that we are back to the original question. Does the mere fact that conscious sense perception requires a "rule" (which may be only the concept of identity) make it subject to the entire set of categories, i.e., place it in the objective time order? Yet, although Wolff does not explicitly take note of this question, I think his analysis suggests a way of answering it. Even in rudimentary "reproduction," or memory, if we consider the conceptual *connection* alone and make a judgment about it, we find a sense in which it is objective. A sense perception is subjective, and so is our memory of it; but the fact that a present content of our consciousness is a memory of a particular past content of our consciousness (and no other) is *objectively* a fact. The requirements as to what is necessary for memory apply to it. In this way a subjective occurrence in consciousness, adequately interpreted, can be given a "necessary" place in the objective world. Kant himself provides one clear statement of this point, along with many obscure ones:

... were I to posit the antecedent and the event were not to follow necessarily thereupon, I should have to regard the succession as a merely subjective play of my fancy; and if I still represented it to myself as something objective, I should have to call it a mere dream. Thus ... the relation of cause to effect—is the condition of the objective validity of our empirical judgments ... the condition of experience (p. 227, A201–202).

In other words, if we dream about a house, we have a subjective house but an objective dream. The existence of this house was not preceded by the activities of a carpenter, but we assume that it was preceded by psychological causes.

This process of combining and allocating sense perceptions to fit them in somehow or other—even if we have to do so by supplying a reason why they do not fit—is the “regulative” use of the “dynamical” categories (while the “mathematical” categories apply to sense perceptions just as they come). We may have to use imagination to fill in the missing parts of a sequence to make it “necessary”; but with this aid, as Wolff mentions in an important statement to which he seems never to call further attention, “any sequence of steps could be built into a rule” (124).

One other point about Wolff’s proof should be noted. It is perplexing that we should have to think things in a different time order from that in which we perceive them, especially since the latter order is also, if all the conditions are specified, one about which we have no choice. Kant’s argument that we can imagine sense perceptions in any order we please but cannot perceive them in any order we please is quite irrelevant, if he is to call the order in which we actually see the sides of a real house subjective. In fact, Kant also argues that the order in which we see things is reversible only if objectively the things are all there at once.¹⁰ At that point, Wolff partly clarifies the matter, pointing out that the order of perceptions, once they have occurred, cannot be changed any more than the order of objective existence; that Kant really means the perceptions *could have* occurred in a different order; in other words, that it is counterfactual relations that determine the objectivity of the object. “It is not easy” for Wolff, however, “to see how the notion of the counterfactual can be worked into the argument of the Analytic” (290–291).

It is not easy, I think, only because Wolff unaccountably ignores Kant’s constant reliance on this very notion, under the name of “possible experience.” Since things in themselves are unknowable, i.e., “the object cannot be a distinct entity from the representations of it,” in Kant’s view, Wolff reasons that Kant must regard the object as “simply a *special way of organizing the representations*” (264). Insisting that this is not subjectivism, Wolff admits that “many will feel” the contrary; and he can answer them, on behalf of Kant, only that “universality and necessity are all you can get” (322). Yet, in analyzing the Postulates, which he seems to regard as something of an after-

¹⁰ Kant, *op. cit.*, p. 233 (B257).

thought, Wolff notes their doctrine that "To say that something exists is simply to say that it can be perceived, or can be connected by empirical laws with other things which can be perceived" (295). The actual object is identified not with actual sense perceptions alone but with actual *and possible* ones; and we know what perceptions are possible (by definition), when they are not actual, only by their *necessary connection* with actual perceptions in terms of the concept of an object. And although the counterfactual form of statement did not occur to Kant, surely the connection that tells us what is possible tells us also what would have been possible—independently of whether anyone actually has or had the sense perceptions involved.¹¹

Thus the "rules" that objectify our sense perceptions do not change their temporal order after all, but relate them to *possible* sense perceptions in the *same* temporal framework. When we see the sides of a house in succession, if we are dreaming, that is all there is to the house; but if the house is real, there is this and more. Each side is objectively there when we see it, but *also* at other times; and the other sides are also there (i.e., could be seen) at the same time. The rules tell us that we *must* see the sides successively if we walk around a real house, that we would still see the first side if we had stayed at the starting point, that a house that acts otherwise is an illusion, and that, if we wake up in bed immediately afterward, the house has been a dream. And if we hear the boat's whistle here after we see its smoke downstream, an occurrence which Wolff regards as embarrassing for Kant (268, 275), we infer sound waves and light waves as part of the objective causal sequence, because we *cannot* change the order of our perceptions, even in thought, without thinking incorrectly. We can, however, explain their order in thought, filling in with events which we do not perceive but construct, to provide whatever the rule makes necessary.

The temporality of consciousness is still as important as Wolff regards it, above all because it makes "reproduction according to a rule," in the form of memory, necessary even for subjective consciousness. The difference between the objective and the subjective, however, turns out to be conceptual rather than temporal, and to concern inclusion of the possible with the actual. The importance of Wolff's suggestion lies in its clarification of the fact

¹¹ A detailed theory of objective reality in terms of counterfactuals is presented by C. I. Lewis, who regards it as directly suggested by Kant and uses Kant's example of the successively observed sides of the house to lead up to the full-scale exposition of his own view. Cf. *An Analysis of Knowledge and Valuation* (LaSalle, Ill.: Open Court, 1950), pp. 20, 211 ff.

that all sense perceptions must be *both* subjective and objective, if the criteria of objectivity are to be derivable from the necessary conditions of consciousness.

Wolff presents a detailed, critical argument which invites detailed, critical discussion. But whether or not his central argument is entirely valid as a "proof," its effectiveness as a basis for exposition of Kant's doctrine is quite indisputable; and the exposition itself is both lucid and illuminating to an unusual degree.

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CORRECTIONS TO A REVIEW

Readers have been puzzled by the phrase "amateurs of logic" in my review of *Proceedings of the Boston Colloquium for the Philosophy of Science*, this JOURNAL, 61, 13 (June 25, 1964), p. 404, line 7. Though the *Oxford Universal Dictionary, Third Edition* (1955), takes an amateur to be—as I intended it—one who loves, is fond of, or has a taste for, anything (as well of course as one who cultivates anything as a pastime, hence occasionally a dabbler), I beg leave to substitute, say, "lovers of logic" for the incriminated phrase. I never meant to suggest that Professor Marcus's point concerning the existential quantifier is for dabblers, let alone that it is a dabbler's point.

All concerned, by the way, will want the formula ' $(\phi c_1 \vee \phi c_2 \vee \dots \vee \phi c_n) \supset (\exists x)\phi x$ ' on lines 23 and 25 of the same page to run ' $(\exists x)\phi x \supset (\phi c_1 \vee \phi c_2 \vee \dots \vee \phi c_n)$ ', and the formula ' $(\phi c_1 \vee \phi c_2 \vee \dots \vee \phi c_n) \rightarrow (\exists x)\phi x$ ' on line 26 to run ' $(\exists x)\phi x \rightarrow (\phi c_1 \vee \phi c_2 \vee \dots \vee \phi c_n)$ '. It is indeed in the presence of ' $(\exists x)\phi x \rightarrow (\phi c_1 \vee \phi c_2 \vee \dots \vee \phi c_n)$ ' that ' $\Diamond (\exists x)\phi x$ ' proves strictly equivalent to ' $\Diamond (\phi c_1 \vee \phi c_2 \vee \dots \vee \phi c_n)$ ', that ' $(\exists x) \Diamond \phi x$ ' proves strictly equivalent to ' $\Diamond \phi c_1 \vee \Diamond \phi c_2 \vee \dots \vee \Diamond \phi c_n$ ', and hence that Professor Marcus's axiom ' $\Diamond (\exists x)\phi x \rightarrow (\exists x) \Diamond \phi x$ ' proves redundant.

Another clerical error, this time on lines 8–9 of the same page, has Professor Marcus asking for "a direct, unequivocal reading of ' $(\exists x)\phi x$ '...." Her own words go: "a direct, unequivocal colloquial reading of ' $(\exists x)\phi x$ '...." My apologies for the misquotation.

HUGUES LEBLANC

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